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Re: Jeffrey Brook McCollum, et al. v. Steven Paul Bentley, et al.

Date: November 30, 2018

Introduction: Amanda Bradley of the law firm McAngus Goudelock & Courie, LLC contacted me and asked if I would review the case of Jeffrey Brook McCollum and Hannah Whitfield McCollum v. Steven Paul Bentley, Jacoby Trucking and Delivery LLC and Foundation Xpress, LL and John Does. I was provided a set of voluminous medical records and video footage. I agreed to the review. Below are my major opinions on this case.

1.) OPINIONS

OPINION #1: The plaintiff did not suffer a physical brain injury associated with the motor vehicle accident that occurred on May 13, 2014.

Evidence to support this opinion comes from the medical records, video footage and accident reports. A police report dated 5/13/2014 documenting that an 18-wheel truck rear-ended the Mr. McCollum's 2007 Chevy pickup truck on Highway 29 near Williamston, South Carolina. This accident occurred at approximately 2:30 PM on May 13, 2014. Williamston EMS was on the scene evaluating the patient approximately 10 minutes later at 2:40 PM. EMS reported that they found the patient sitting in the driver's seat of a pickup truck complaining of neck and back pain. He was a restrained driver with a seatbelt who was struck from behind by an 18-wheeler with an estimated speed of 35 miles per hour. Airbags did not deploy. Physical examination revealed a "small scratch on the right side of his face near his eye." His neck and back were reportedly "tender upon palpating." No other injuries were found. The Glasgow Coma Score (GCS) was 15/15. Other than the above, no other injuries were noted.

Mr. Collum was transported to AnMed Health and arrived to the ED at approximately 3:06 PM. There was no report of loss of consciousness reported. Likewise, a GCS of 15/15 10 minutes after the accident would be highly inconsistent with loss of consciousness. While it is possible that there could have been a minor concussion, this is not the type of injury that would produce any

physical damage to the brain. If there had been a minor concussion, and there was never this diagnosis, the prognosis would be for swift and complete recovery to normal baseline.

At AnMed Health ED, an abrasion to the right cheek and a small laceration just below the right eye was noted. Mental status was assessed to be normal, alert and oriented times x4. An abdominal scan was negative except for an incidental finding of small, calcified gallstones. A cervical x-ray was negative. Emergency room Dr. Thomas Kickham obtained the history of pain between the shoulder blades and "a little bit of tingling numbness to the left side neck down to the left arm." Confounding this complaint was a reported prior injury to the left elbow with some mild numbness to the left fifth digit of his right hand two years earlier. Notably, there was no headache pain complaint. Physical exam showed an 8 mm lesion to the inferior right lateral canthus area and a bruise about 2×3 cm to the right lateral the zygomatic area. Range of motion was described as stiff. The laceration was repaired with two stitches. The final diagnosis was motor vehicle accident, cervical strain, back strain, facial contusion, and laceration to the face. Ice, gentle range of motion, exercise, ibuprofen or Aleve, and having the sutures out in 5-6 days were recommended. Norco was prescribed.

In summary, there was no diagnosis of concussion or brain injury and nothing in the history or exam to warrant ordering a CT of the brain. There were no concussive symptoms. There was no loss of consciousness. There was no post-traumatic amnesia or retrograde amnesia. There was no confusion at the scene or in the ED. The GCS was 15/15 10 minutes after the accident occurred. That is to say, there was nothing to suggest a brain injury.

The first follow-up note for the accident in question occurred about two weeks after the accident in question. The plaintiff presented at Pottersville Family Practice with the chief complaint of low back pain, neck pain, and stitches needing to be removed. Review of systems was positive for back pain, muscle pain, neck pain, headaches, numbness, paresthesias, and radicular pain. There were no subjective symptoms suggested of post-concussive syndrome or a brain injury. Mental status was not noted to be abnormal. An x-ray of the lumbar spine was completed and was unremarkable. The diagnosis was left-sided, low back pain radiating to the left leg. Naprosyn was prescribed. A muscle relaxer was refilled. The MRI impression was transitional L5 vertebral body, which is typically a congenital or developmental anomaly in which the vertebra has the characteristics of two different types of vertebra. There was no evidence of acute bone injury.

The next note was approximately one month later when the plaintiff called this practice and reported low back pain with shooting, stabbing qualities "when he moved in certain ways." There was nothing else associated with this note. There were no signs or symptoms of postconcussive syndrome or brain injury. There is no diagnosis of concussion or brain injury.

The next note was over six months after the accident in question when the plaintiff presented again to Pottersville Family Practice on 12/4/2014. The chief complaint was low back pain that radiated to the posterior left leg and dorsal aspect of the left fifth digit. Pain was across the entire low back located in the lumbar and lumbar sacral area. Pain was aggravated by weightlifting, prolonged standing and prolonged sitting, and was relieved by lying down. In combination with the report of "weightlifting" aggravating back pain and the *Back Road Outlaws* videos, I suspected he might have had yet another injury to his back after I watched him lift the rear end of a car off the ground. Again, the mental status portion of the physical exam was unremarkable. The diagnosis was chronic radicular low back pain. Zorvolex (NSAID) was prescribed. Yet again, there were no signs or symptoms presented they were suggestive of postconcussive syndrome or brain injury. There was no diagnosis of concussion or brain injury.

The plaintiff was referred to Stephen Keiser, M.D. The first appointment was on 12/22/2014 over six months after the accident in question. No dizziness or lightheadedness was reported and there were "no head symptoms." There were no postconcussive-like symptoms. The assessment was low back pain with chronic radicular symptoms and L5 – S1 bulging disc on MRI. Conservative treatment was employed and he was given Medrol dose pack. A follow-up visit on 1/30/2015 revealed minimal, if any change, in pain since the last visit. Epidural spine injection or surgery was recommended as treatment options. He was provided nonsteroidal anti-inflammatory. Again, there were no signs or symptoms suggestive of postconcussive syndrome or a diagnosis of concussion/brain injury.

There was an isolated note from Bethany Powers, D.O. on 8/17/2016 or approximately two years after the accident in question. The presenting complaint was continuing back pain. At this point there were new symptoms of headache "all the time." Complaints of driving tractors at work with the vibration causing irritation to the back were reported. New complaints of not being able to focus his eyes were reported. The only medicine currently being used was Aleve PRN. There was report that he had been sent to the eye doctor by his attorney, but ophthalmology could not find any corresponding eye issues related to the MVA. In physical exam there was back tenderness noted in the back/neck region. There was

some weakness noted on the left side. There were no signs or symptoms of postconcussive symptom other than the newly reported headache. There was no diagnosis of concussion or brain injury. The diagnosis was hyporeflexia, weakness of the left leg, vision abnormalities, neck and back pain. A muscle relaxer and meloxicam were prescribed.

Did Mr. McCollum suffer brain damage in the accident of 5/13/2014?

According to any respected national/international scientific consensus standard, the answer is a resounding no. Advances in the diagnosis and treatment of brain injury have advanced in the last few decades to the point that there are now multiple consensus guidelines from various professional organizations such that the diagnosis of brain injury can be made based on scientific evidence. Using various professional national consensus guidelines such as the Psychiatry Diagnostic and Statistical Manual-IV, American Academy of Neurology Practice Parameter (1997), Defense and Veterans Brain Injury Center Updated mTBI clinical guidance (2008), American Congress of Rehabilitation Medicine, Center for Disease Control, American Medical Association Guides, Recommendations for diagnosing a mild traumatic brain injury: A National Academy of Neuropsychology Education Paper (2009), Cantu (1988), the plaintiff's injury would not classify as a significant concussion and is certainly not a physical brain injury that would represent any long-term consequences. Indeed, according to Guides to the Evaluation of Permanent Impairment 6th Edition, "Special mention should be made of mild traumatic brain injury (MTBI), which has been the subject of extensive research in the last ten-to-twenty years. In contrast to previously held belief, the symptoms of mild traumatic brain injury generally resolve in days to weeks, and leave the patient with no impairment.^{6,7} Patients with persistent postconcussive symptoms generally have non-injury related factors which complicate their clinical course. Postconcussive syndrome is relatively rare sequelae of MTBI, seen in 1-5% of all MTBI patients."

In this particular case, at worst, the plaintiff suffered a very minor concussion. A minor concussion carries with it an extremely favorable prognosis for swift and complete recovery of function back to baseline within hours to days to weeks. However, this is unlikely since the plaintiff was never diagnosed with a concussion despite the multiple providers that have seen him repeatedly over multiple months, and more importantly, the facts surrounding this case that include a normal MRI brain scan showing no brain damage and no concussion or traumatic brain injury

complaints. Until the plaintiff's attorney referred him to Dr. Smith, there were never any signs or symptoms suggestive of a brain injury that had been reported.

In summary, the plaintiff had seen multiple doctors and other healthcare providers with no signs or symptoms suggestive of a brain injury, postconcussive syndrome, depression, anger, or other psychopathology had ever been reported. According to any respectable major scientific consensus standard, there is absolutely no evidence to support a brain injury.

OPINION #2: Well after the injury in question, Arthur Smith, M.D., Martin Ruocco, PhD, M.D., and James Evans, PhD failed to provide objective evidence of a physical brain injury related to the accident of 5/13/2014.

Evidence to support this opinion comes from the medical records and my personal clinical expertise and knowledge of scientific literature as a seasoned clinician/educator and Professor of Neurology at a major medical teaching hospital. The first suggestion of a possible brain injury came from Arthur Smith, M.D. associated with a referral by the plaintiff's attorney surrounding a visit that occurred on 10/12/2016. This was almost 2 1/2 years after the accident in question. In the first visit to Dr. Smith, the chief complaint for the visit was not post-concussive symptoms, but rather back pain. The plaintiff reported that even after the laminectomy there was continuing pain with weakness and numbness in the left leg. Reportedly the plaintiff had been "unable to tolerate" physical therapy (PT) and that was never explained. An alternative explanation might have been noncompliant with PT. New symptoms that had never been reported before included "recurrent severe headaches, dizziness, poor memory and concentration, blurred vision, depressive symptoms and gait unsteadiness." Definitive loss of consciousness was reported and that was inconsistent with the objective records including EMS personnel who were at the scene 10 minutes after the accident occurred, who likely interviewed eyewitnesses.

This doctor's objective examination revealed no evidence of a brain injury with negative findings in all neurocognitive domains with the exception of weakness and sensory change to the left lower extremity. In spite of the negative findings in examination, this doctor diagnosed concussion with loss of consciousness of 30 minutes or less, postconcussive role syndrome, epilepsy, major depressive disorder, moderate, and a number of other diagnoses. Rather than definitive diagnoses as this list suggested, these appeared to be rule-outs. He ordered a number of tests to confirm or refute the differential diagnoses. Nerve conduction

studies were ordered and read by him, showing evidence of abnormality at C5-6, C6-7, L4-5, and L5-S-1. An EEG was normal and that apparently ruled out epilepsy in his differential. An MRI of the brain was normal and showed no evidence of physical brain damage associated with the accident of 5/13/2014 read by Dr. Ruocco, PhD, MD. In spite of the negative finding, this doctor stuck with the diagnosis of a brain injury, which was inconsistent with the evidence.

A lumbar spine MRI showed mild to moderate nerve encroachment at L5-S-1 as well as some other multilevel degenerative disease changes. A cervical study likewise showed multilevel mild degenerative disease changes. Physical therapy was ordered. Therapy occurred for one visit only and demonstrated low back pain with left radicular pain rated as "5/10" increasing to the most extreme imaginable pain at 10/10 during flexing, lifting, pushing, pulling etc. Strength rating was 4-/5 across the left lower extremity. It would seem that the plaintiff again had been noncompliant with the physical therapy program. There were several follow-up visits with Dr. Smith approximately two months later on 12/16/2016 where dizziness was reduced after the Epsley maneuver and a back brace seemed to have helped with low back pain. Additional visits on 2/17/2017 included the diagnosis of benign paroxysmal vertigo. There was one final visit on 4/5/2017.

In summary, the diagnosis of a brain injury made by Dr. Smith was inconsistent with his own objective examination and the objective brain MRI imaging, which he ordered. The diagnosis of a brain injury was highly inconsistent with any national or international professional group consensus, including his professional organization.

Dr. Martin Ruocco, M.D., Ph.D. supervised and read a brain MRI of the plaintiff performed on 11/1/2016. The methodology seemed standard of care. The findings were unremarkable without any evidence of physical brain damage associated with the accident of 5/13/2014.

The plaintiff was referred to neuropsychologist James Evans, PhD by the plaintiff's attorney with the visit that occurred on 1/12/2017. This visit was almost 2.75 years after the accident in question.

Briefly, the principles of neuropsychological testing are to administer a number of cognitive (and psychological) tests. The results obtained are compared to where the individual was thought to be functioning like before an injury or brain disease. Population norms and guesstimates as to how the person might have scored before the injury or brain disease in question are then compared to current scores obtained

from the examination. Any difference is then inferred to have been caused by the event in question. Obviously there are many potential logical flaws in this methodology. Importantly, in this case since there were no premorbid scores with which to compare the current scores, there is a lot of guesstimating that is occurring because no one knows what the pre-accident score would have been. Additionally, one can fail a neurocognitive test for two reasons. One is impaired cognitive function; the other reason is less than ideal effort during a demanding multi-hour testing session. For this reason, extensive psychosocial information and ideally prior academic testing scores, and grades, should be sought out to improve pre-accident guesstimates functioning. Of critical importance is ensuring that reliable effort was obtained throughout the entire examination must be done before interpreting the obtained data. Otherwise, less than maximal effort could be erroneously interpreted as a sign of brain damage. Lastly, when in doubt, tests can always be replicated. If there is a real brain related deficit, scores will be the same across time and across examiners. This doctor's examination did not achieve the above goals.

Dr. Evans did obtain a background history from the plaintiff graduating from high school, but failed to ask about GPA, class standing, repeating any grades or special education. This doctor did not obtain any external confirmation of the reported graduation or associated metrics. No questions about PSAT/SAT/ACT were asked or reported. It was reported that he briefly attended technical school for a short time preparing to specialize in NASCAR racing mechanical work, but dropped out after the death of his brother. Details were never provided about these circumstances. Technical school academic records were never obtained for external confirmation and there were no metrics reported. Reportedly, the plaintiff became a welder. Alarming, a history of "reading problems in school" was reported and the plaintiff's education involved "content was read to him." This is a major red flag confounding variable that was never investigated as this kind of history could easily explain poor scores on cognitive testing. It sounded to me as if the plaintiff had an Individual Education Plan (IEP) for a learning disability. Whether this was true or not was never investigated. The plaintiff also reported that "he was once told that he might have attention deficit disorder" and remarkably this was not further investigated as a major potential confounding factor relating to the interpretation of his test results. This is hugely important, as one of the claims in this case is the plaintiff having problems with attention and concentration allegedly caused by the accident in question.

While there was no evidence of loss of consciousness from the objective reports as early as 10 minutes after the accident in question, it was reported rather

definitively by this doctor that the plaintiff “had loss of consciousness for 30 to 60 seconds.” This doctor obtained history that back pain was reportedly limiting physical activities and continuous headache pain as well as other symptoms were interfering with the marriage and employment potential. The veracity of this subjective complaint appears to be taken at face value as a fact with no further investigation or external confirmation of the report even though the case was in litigation and the referral came from the plaintiff attorney. There were also reports of difficulty controlling anger, problems with concentration and staying on task and impaired memory with difficulty relaxing. No efforts were made to determine if these traits pre-existed as might be seen in academic school records and there was the concerning episode of assault and arrest uncovered in the criminal background check as reported in deposition. Further, all of these subjective complaints were new and never had been reported prior to this visit, except perhaps some of these symptoms to Dr. Smith, and these inconsistencies were apparently never considered as suspicious. Interestingly, in spite of the subjective report of behavioral dyscontrol and loss of emotional control, this doctor witnessed no such behavior during the examination and never seemed to incorporate that inconsistency into his report.

Did the plaintiff give maximal effort during the entire examination or was poor performance related to effort in the exam and misinterpreted as brain damage?

Dr. Evans gave only one isolated performance validity measure and felt that the score showed no strong evidence of overt malingering in this isolated measure. He seemed to generalize that finding to all other cognitive measures given during the multiple hours of testing. The particular performance validity measure chosen did show a marginal pass and the measure itself is well known to have poor properties of validity and high rates of false negatives for ensuring adequate effort throughout the examination. This is below neuropsychological standard of care particularly in forensic cases. Typical standard of care is two overt performance validity measures and several embedded effort measures are interspersed throughout the entire examination to ensure adequate effort and minimize the risk of labeling poor effort as brain damage. To have a single past effort measure and to generalize that full effort was given through a long neuropsychological battery is below standard of care, particularly in a forensic setting.

Further, this case involves an enormous amount of subjective complaints with little in the way of objective findings. Symptom validity measures are crucial in such cases and were suspiciously missing in this evaluation.

Cognitive testing was administered and the vast majority of the scores were within normal limits. Some of the abnormal scores were confounded by sensory motor dysfunction that was demonstrated by Dr. Smith in nerve conduction studies to be abnormal. Throughout the testing I saw inconsistent findings with, for example, certain kinds of memory being affected and other types of memory being unaffected. The pattern of loss could have easily been attributed to lifelong ADHD, learning disability, less than ideal consistent effort and/or limited IQ. Lastly, there is a wealth of scientific evidence that shows in meta-analyses that the effect size of a minor brain injury becomes obscured in test variance about three months after such an accident where patients with a mild traumatic brain injury cannot be distinguished from normal controls. This means that patients with mild traumatic brain injury get better and show no reliable deficits in neuropsychological test scores at about 3-months post injury (Rohling, et al., 2011).

A QEEG was obtained by Dr. Evans and I am not sure that this doctor is particularly qualified to use this technique clinically. Additionally, the American Academy of Neurology issued a consensus statement entitled, "Assessment of digital EEG, quantitative EEG, and EEG brain mapping." This report was published by the American Academy of Neurology and the American Clinical Neurophysiology Society and cautioned that EEG brain mapping and other advanced QEEG techniques should be used only by physicians highly skilled in clinical EEG, and only as an adjunct to and in connection with traditional EEG interpretation (and for the plaintiff that standard study EEG had been read as normal). Further, this group opined that QEEG remains investigational for clinical use in postconcussive syndrome, mild or moderate head injury, and that QEEG is not recommended for use in civil or criminal judicial proceedings. The technique was given a "Type E" scientific rating, which translates to "negative recommendation based on evidence of ineffectiveness or lack of efficacy." This would be in contrast to a "Type A" rating which has "strong positive" recommendation based on Class I evidence or overwhelming Class 2 evidence such as randomized, double-blind, placebo-controlled scientific trials that have been replicated. Since this consensus statement was issued, little has changed and the technique has never been adopted as a standard of care measure in any major widely respected national or international professional consensus guideline for diagnosing mild traumatic brain injuries.

Additionally, this doctor used the Rorschach inkblot test to assess emotional control. While the Rorschach has a prominent place in the history of psychological testing, the use of the Rorschach particularly in neuropsychological forensic settings is far outside the standard of care.

In summary this doctor found some strengths and weaknesses in the cognitive testing that, in my opinion, most likely correlate with the plaintiff's normal baseline, possibly confounded by his history of ADHD, learning disability, below average IQ and/or less than ideal effort across all measures. Many of the tests administered were likewise confounded by sensorimotor weakness (related to use of hands and dexterity while performing neuropsychological tests) as Dr. Smith had previously demonstrated in his abnormality in the upper extremities with nerve conduction studies. Lastly, this examination seemed inherently biased in not considering the numerous competing and confounding explanations for this subjective symptoms report, particularly given that the plaintiff does not meet criteria for brain injury as outlined by any major scientific consensus guidelines that defines a brain injury.

OPINION #3: The plaintiff's subjective complaints are most probably due to a phenomenon called "misattribution" and confounded by other issues such as litigation.

Evidence for this opinion comes from my personal expert clinical experience and the scientific literature. I provide noninclusive representative sample of scientific literature on the topic to educate the reader attached in reference section of this report.

As reviewed above, subjective symptom complaints play no major role in the objective diagnosis of a brain injury, and instead are supporting features of the diagnosis. This is because in the clinical, and particularly forensic, setting subjective complaints are often misleading. In evidence-based practice, best practices most often stick with scientifically guided consensus opinion and objective finding. Nonetheless, subjective complaints to the lay population are often convincing.

What then is the basis of the plaintiff's litany of subjective complaints? It is my opinion that the subjective complaints are attributable, at least in part, to a phenomenon described in the scientific literature as "symptom misattribution." I opine that this is one of the most likely explanations of the plaintiff's many subjective symptoms that do not have objective, supportive signs. While symptom misattribution is a likely cause of the many subjective complaints, malingering also remains very high as a rule-out explanation. The latter was not adequately investigated and will remain an open question.

Symptom misattribution is a concept that was advanced by Mittenberg, et al. (1992) and others to help explain the incidence and persistence of postconcussive symptoms experienced by a minority of patients who had many complaints and few objective findings in the absence of a significant brain injury, often involving cases of ongoing litigation. Mittenberg argued that unexplained postconcussive symptoms are related to the degree to which an individual reattributes common everyday emotional/somatic complaints to a head injury. As an example, an individual may begin attributing all headaches to a head injury, and forget (or block out) the presence of headaches prior to the injury. Instead of a long day at work being the cause of a headache, the headache is misattributed to the lingering effects of the head injury. As such, everyday complaints that most people endorse become linked or attributed to an important event or injury. As such, these symptoms become very refractory to treatment since such symptoms occur during the normal course of living.

To give the reader a sample of this scientific literature on this topic, Gunstad and Suhr (2001) studied 141 patients. The sample consisted of normal healthy controls, those with chronic headaches, and athletes with mild traumatic brain injury. The authors found that depressed individuals reported more post-concussive-like symptoms than those that actually had a mild traumatic brain injury, demonstrating that post-concussive symptoms are not specific to a true post-concussive brain injury syndrome. The authors also found that following any major injury related event, it is common for people to misattribute symptoms to that event. In a similar study by the same authors, they again found that post-concussive symptoms are not specific to head injury and concluded that non-neurological factors are more closely related to post-concussive symptom complaints than head injury status.

In a more recent study (Iverson, et al., 2010) cited many studies that have shown that only a small percentage of people report symptoms many months after a mild traumatic brain injury. They replicated other research also finding that most of these individuals that had a minor head injury significantly underestimated their own past history of emotional/somatic symptoms (i.e., “good old days” bias). This tendency for misattribution adversely impacts the subjective severity of current perceived symptoms and has adverse implications for recovery. In this study, the authors evaluated 90 subjects presenting to a concussion clinic with mild traumatic brain injury who were all considered temporarily fully disabled from a mild traumatic brain injury and were receiving financial compensation through the Worker's Compensation system. Patients provided post-injury and pre-injury

retrospective post-concussive symptom ratings. Ratings were compared to 177 healthy controls. Consistent with the “good old days bias,” mild traumatic brain injury patients retrospectively endorsed the presence of fewer pre-injury symptoms compared to the control group. Individuals who failed effort testing tended to retrospectively report fewer symptoms pre-injury compared to those patients who passed effort testing. Like many others have reported, these authors also found that mild traumatic brain injury patients report their pre-injury functioning as better than the average person. The authors confirmed that this misattribution bias can negatively impact patient’s perception of current problems, recovery from injury, and return to work.

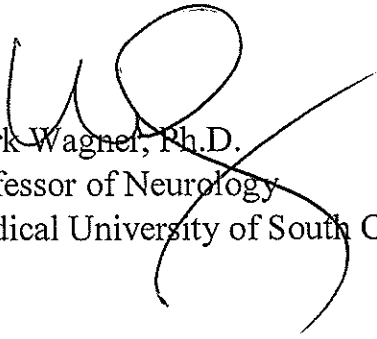
In a similar study, Lange, et al. (2010) found that litigating patients with mild traumatic brain injury reported more post-concussive symptoms than non-litigating. Interestingly, both groups (litigating and non-litigating) misperceived their pre-accident functioning as better than normal health controls, which is commonly reported in the literature as a misattribution bias and is consistent with the “good old days” reporting bias.

2.) OTHER

- A. All opinions offered are given within a reasonable degree of neuropsychological certainty.
- B. The facts and data considered forming my opinions are contained in what I understand to be Mr. McCollum’s complete post-injury medical records provided by the defense attorney(s) in this case, with the most relevant records reviewed summarized above. Additionally I reviewed surveillance footage, Back Yard Outlaw film clips and Mr. and Mrs. Collum’s depositions. Missing were his financial and academic records. A list of references quoted is included in the attachment entitled, “Scientific Articles Referenced for McCollum.” This is not an exhaustive review of the literature, but rather a representative sample of important studies that have shaped scientific knowledge in the field. I reserve the right to amend my opinions should additional records or other information become available for review, including if I am ever allowed the opportunity to examine Mr. McCollum in the context of an IME.

- a. The records provided and reviewed include the following:
 - i. Demand Letter from Plaintiff's counsel, dated May 11, 2017, with attachments
 - ii. AnMed Health records
 - iii. Powdersville Family Practice records
 - iv. Bon Secours - St. Francis Health System records
 - v. File and Records of Dr. Robert Brabham
 - vi. Dr. William Spearman records
 - vii. Smith Neurological Clinic records
 - viii. Advanced Physical Therapy records
 - ix. Piedmont Spine and Neurosurgical Group records
 - x. Walmart Pharmacy records
 - xi. Anderson Family Medicine records
 - xii. Baptist Easley Hospital records
 - xiii. Deposition of Hannah Whitfield McCollum
 - xiv. Deposition of Jeffrey Brook McCollum
 - xv. Dr. Michael Lynn records
 - xvi. Plaintiff's discovery responses and supplemental discovery responses
 - xvii. Affidavit of Patrick Lefebvre
 - xviii. Plaintiff's Expert Disclosures
 - xix. Back Road Outlaws video
 - xx. Surveillance video
- C. My qualifications are in my attached CV.
- D. Until recent years, I did not keep a list of cases where I have testified as an expert at trial or by deposition. Even so, I believe I was able to compile a relatively complete list of cases where I have testified as an expert in the past 5 years, which is in the attachment.
- E. My fee schedule for forensic work is at the rate of \$375/hour for reviewing records and writing opinions, and \$500 for testimony. As of 11/29/2018 my cumulative charges on this case are \$6750.00.

Respectfully submitted,



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Scientific References Cited

AMA and Rondinelli (2009). AMA Guides to the Evaluation of Permanent Impairment, 6th Edition.

Cantu, R (1998). Return to play guidelines after a head injury. *Clinical Sports Medicine*, 17: 45-60.

Centers for Disease Control and Prevention. Heads up. Facts for physicians about mild traumatic brain injury (MTBI) Atlanta, GA: Centers for Disease Control and Prevention; 2007.

Defense and Veterans Brain Injury Center Updated mTBI clinical guidance. Washington, DC: Defense and Veterans Brain Injury Center; 2008.

Diagnostic and Statistical Manual of Mental Disorders, 5th edition. American Psychiatric Association Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: American Psychiatric Association.

Diagnostic criteria for mild traumatic brain injury from the American Congress of Rehabilitation Medicine. Mild Traumatic Brain Injury Committee Definition of mild traumatic brain injury. *J Head Trauma Rehabil*. 1993;8(3):86–7.

Gunstad, J., & Suhr, J. A. (2004). Cognitive factors in postconcussion syndrome symptom report. *Archives of Clinical Neuropsychology*, 19, 391-405.

Gunstad, J., & Suhr, J. A. (2001). “Expectation as etiology” versus “the good old days”: Postconcussion syndrome symptom reporting in athletes, headache sufferers, and depressed individuals. *Journal of the International Neuropsychological Society*, 7, 323-333.

Iverson, G. L., Lange, R. T., Brooks, B. L., & Rennison, V. L. A. (2010). “Good old days” bias following mild traumatic brain injury. *The Clinical Neuropsychologist*, 24, DOI: 10.1080/13854040903190797

Lange, R. T., Iverson, G. L., & Rose, A. (2010). Post-concussion symptom reporting and the “good-old-days” bias following mild traumatic brain injury. *Archives of Clinical Neuropsychology*, 25, 442-450.

Mittenberg, W., DiGiulio, D. V., Perrin, S., & Bass, A. E. (1992). Symptoms following mild head injury: Expectation as aetiology. *Journal of Neurology, Neurosurgery, and Psychiatry*, 55, 200-204.

Nuwer, M. (1997). Assessment of digital EEG, quantitative EEG, and EEG brain mapping: Report of the American Academy of Neurology and the American Clinical Neurophysiology Society, *Neurology*, 49: 277-292

Practice Parameter: The management of concussion in sports (summary statement). *Neurology*, 1997; 48: 581-585.

Rohling, ML, Binder, LM, Demakis, GJ, Larrabee, GL, Ploetz, DM & Langhinrichsen-Rohling, J. (2011). A meta-analysis of neuropsychological outcome after mild traumatic brain injury: re-analyses and reconsiderations of Binder et al (1997), Frencham, et al. (2005, and Pertab, et al., 2009). *The Clinical Neuropsychologist*, 25.

Ruff, et al. (2009). Recommendations for diagnosing a mild traumatic brain injury: A National Academy of Neuropsychology Education Paper. *Archives of Clinical Neuropsychology*, 24: 3-10.